

This listing of claims replaces all prior versions, and listings of claims in the instant application:

Listing of Claims:

1. (Previously Presented) An anti-malware file scanning system for computer files being transferred between computers, the system being implemented on a computer apparatus and comprising:

a) a computer database containing records of known executable programs which are deemed to be not malware and criteria by which a file being processed can be determined to be an instance of one of those programs, the criteria including at least one characteristic signature associated with each said instance;

b) means for processing a file being transferred between computers, the means b) comprising:

a file recogniser operative to determine whether the file being processed is an instance of a known program by checking the contents of the file being processed for the presence of said at least one characteristic signature associated with the said instances; and

a difference checker operative, in the case that the file recogniser determines the file being processed to be an instance of a known program, to check whether the file is an unchanged version of that known program; and

c) means for signalling the file, depending on the determination made by the processing means, as being:

likely to be not malware if it is an unchanged version of a known file;

likely to be malware if it is a changed version of a known file; or

of unknown status if it is not determined as being an instance of a known file.

2. (Previously Presented) A system according to claim 1 and including:

d) means for processing a file being transferred between computers to determine whether it is considered to be, or considered possibly to be, malware, and wherein the means d) is operative to subject a file to processing if the file is signaled by the signalling means c) as being of unknown status.

3-4. (Canceled)

5. (Previously Presented) A system according to claim 1 wherein the difference checker is operative to generate a checksum for the entire file under consideration or for at least one selected region thereof, and to compare the checksum or checksums with those of entries in the database.

6. (Previously Presented) A system according to claim 1 and including an exception list handler operative to determine, in relation to a file which the processing means b) has determined is a changed version of a known file, whether that file has characteristics matching an entry in an exception list of files, the signalling means c) being operative to signal the file as malware only if it is not in the exception list or as being of unknown status otherwise.

7. (Previously Presented) A method of anti-malware scanning computer files being transferred between computers, the method comprising:

maintaining a computer database containing records of known executable programs which are deemed to be uninfected and criteria by which a file being processed can be determined to be an instance of one of those programs, the criteria including at least one characteristic signature associated with each said instance;

processing a file being transferred between computers by determining whether the file being processed is an instance of a known program by checking the contents of the file being processed for the presence of said at least one characteristic signature associated with the said instances, and

checking, in the case that the file is determined to be an instance of a known program, whether the file is an unchanged version of that known program;

signalling the file, depending on the determination made by the processing, as being:

likely to be not malware if it is an unchanged version of a known file;

likely to be malware if it is a changed version of a known file; or

of unknown status if it is not determined as being an instance of a known file; and

storing the determination that the file is likely to be not malware, is likely to be malware or is of unknown status.

8. (Previously Presented) A method according to claim 7 and including:

processing a file being transferred between computers to determine whether it is considered to be, or considered possibly to be, malware, if the file is signalled by the signalling step c) as being of unknown status.

9-10. (Canceled)

11. (Previously Presented) A method according to claim 7 wherein the step of checking whether the file being processed is an instance of a known program comprises generating a checksum for the entire file under consideration or for at

least one selected region thereof, and comparing the checksum or checksums with those of entries in the database.

12. (Previously Presented) A method according to claim 7 further including using an exception list to determine, in relation to a file which the processing step b) has determined is a changed version of a known file, whether that file has characteristics matching an entry in an exception list of files, and wherein, in the signalling step c), the file is signalled as malware if it is not in the exception list or as being of unknown status otherwise.

13. (Previously Presented) An anti-malware file scanning system for computer files being transferred between computers, the system comprising:

a computer database containing records of known executable programs which are deemed to be not malware and criteria by which a file being processed can be determined to be an instance of one of those programs, the criteria including at least one characteristic signature associated with each said instance;

a processor for processing a file being transferred between computers, the processor being operative to determine whether the file being processed is an instance of a known program by checking the contents of the file being processed for the presence of said at least one characteristic signature associated with the said instances and, in the case that the file being processed is determined to be an instance of a known program, to check whether the file is an unchanged version of that known program,

said processor, depending on the determination, identifying the file being processed as (i) likely to be not malware if it is an unchanged version of a known file; (ii) likely to be malware if it is a changed version of a known

file; or (iii) of unknown status if it is not determined as being an instance of a known file.

14. (Previously Presented) An anti-malware file scanning system according to claim 13, further comprising:

a file-scanning subsystem for scanning files identified by the processor as being of unknown status to determine whether the scanned files are malware.

15. (Previously Presented) An anti-malware file scanning system according to claim 14, wherein records for files which are instances of programs determined by the file-scanning system not to be malware are added to the computer database.

16. (Previously Presented) An anti-malware file scanning system according to claim 13, wherein the processor assigns a score to a file identified as likely to be malware.